What is claimed is:

1. A cooling apparatus for a hybrid vehicle,

the hybrid vehicle comprising:

an internal combustion engine for driving the hybrid vehicle;

a motor as a power source for driving the hybrid vehicle together with the internal combustion engine, and

a motor control device for controlling the operation of the motor; and

the cooling apparatus for the hybrid vehicle comprising:

a cooling circuit for cooling said internal combustion engine and said motor control device by common coolant; and

a temperature setting device for setting independently a temperatures a management temperature of the internal combustion engine and the management temperature of the said motor control device.

2. A cooling apparatus for a hybrid vehicle according to claim 1, wherein the cooling apparatus comprises a radiator provided with a plurality of flow paths for radiating heat of said internal combustion engine and said motor, and the temperature setting device sets said management temperatures independently by flowing the coolant through each of said plurality of flow paths.

3. A cooling apparatus for a hybrid vehicle according to claim 1 or claim 2, wherein an output shaft of said internal combustion engine and an output shaft of said motor are mechanically connected.

4. A cooling apparatus for a hybrid vehicle according to any one of claim 1, wherein the cooling apparatus comprises a plurality of thermostats having induction temperatures differ from each other, and each management temperature is independently set at a temperature by means of said plurality of thermostats.

5. A cooling apparatus for a hybrid vehicle according to claim 1, wherein the cooling apparatus comprising:

a circulation path having a water jacket provided in an interior of said internal combustion engine and a water pump which circulates coolant to said water jacket;

a radiator having a plurality of flow paths constituting different flow paths for said coolant;

a supply path which branches from said circulation path at downstream of said water jacket for flowing said coolant to said radiator;

a first flow path for flowing said coolant to said circulation path from said radiator through a first thermostat which has an induction temperature set relatively high;

a second flow path for flowing said coolant to said circulation path from said radiator through a second thermostat which has an induction temperature set relatively low, and also supplies said coolant to said motor control device; and

a bypass flow path which connects said supply flow path to a position downstream of said second thermostat of said second flow path.

6. A cooling apparatus for a hybrid vehicle according to claim 5, wherein said second thermostat is disposed at a position downstream of said motor control device.

7. A cooling apparatus for a hybrid vehicle according to claim 6, wherein

said motor is arranged in a position downstream of said motor control device in said second flow path, and

said second thermostat is arranged in a position between said motor control device and said motor and is connected to said bypass flow path.

8. A cooling apparatus for a hybrid vehicle according to claim 5, wherein said second thermostat is arranged in a position upstream of said motor control device.

9. A cooling apparatus for a hybrid vehicle according to claim 1, wherein the cooling apparatus comprising:

a circulation path having a water jacket provided in an interior of said internal combustion engine and a water pump which circulates coolant to said water jacket;

a radiator having a plurality of flow paths constituting different flow paths for said coolant;

a supply path which branches off from said circulation path at a position downstream of said water jacket and which flows said coolant to said radiator;

a first flow path which flows said coolant to said circulation path from said radiator through a first thermostat which has a relatively high induction temperature;

a second flow path which flows said coolant to said circulation path from said radiator via a second thermostat which has a relatively low induction temperature, and also supplies said coolant to said motor control device; and

a bypass flow path which connects at upstream of said water jacket a position of said circulation path between said water pump and said water jacket to a position on a downstream side of said second thermostat of said second flow path.

10. A cooling apparatus for a hybrid vehicle according to claim 1, wherein the cooling apparatus comprising:

a circulation path having a water jacket provided in an interior of said internal combustion engine and a water pump which circulates coolant to said water jacket;

a radiator having a plurality of flow paths constituting different flow paths for said coolant;

a supply path which branches from said circulation path at a position downstream of said water jacket and which supplies coolant to said radiator;

a first flow path which flows said coolant to said circulation path from said radiator through a first thermostat which has a relatively high induction temperature; and

a second flow path which flows said coolant to said circulation path from said radiator through a second thermostat which has a relatively low induction temperature, and also supplies said coolant to said motor control device; and

said second thermostat is disposed in said circulation path.